

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/766,247	SHAW, SANDY C.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Anh Ly	2162	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/07/2004.
2. ☒ The allowed claim(s) is/are 31-39, 41-63, 65-74 & 76-104 (Renumbered as 1-71).
3. ☒ The drawings filed on 06 August 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

### **DETAILED ACTION**

1. This Office Action is response to Applicant's Amendment filed on 10/07/2004.
2. Claims, 40, 64 and 75 are cancelled.
3. Claims 31-39, 41-63, 65-74 and 76-104 are allowed.

### ***Allowable Subject Matter***

4. The present application has been thoroughly reviewed. Upon searching a variety of databases, the examiner respectfully submits that claims 1-54 are allowed in light of the applicant's argument and in light of the prior of made record.

### **Reason For Allowance**

5. The following is an examiner's Statement of Reasons for Allowance:

The present invention is directed to a method and a system for dataset modeling data and to analyze large datasets and to identify and visualize the significant similarities and differences between large datasets. An iterative algorithm is used to generate comparison strings corresponding to some set of points that can serve as the domain of an iterative function. A number of target strings are provided. The comparison

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string is score by evaluating a function having the comparison string and one of the plurality of target string as inputs.

The applicants argued that, "neither reference teaches that the point alone, chosen from a multi-dimensional map is to represent the comparison string, which itself is a model of the target string...extracting patterns from the points alone." (Page 14, 24-28 and Page 16, lines 3-7).

The closest prior art, Young of 5,416,848 teaches iterative function to evaluate the points in the multi-dimensional space to determine the points in the Julia sets and matching the points in the multi-dimensional space with systematic for controlling the geometry models (col. 4, lines 61-67 and col. 5, lines 1-32 and col. 4, lines 4-60). And Rothberg et al. of 6,141,657 (hereinafter Rothberg) teaches a dataset for sample sequence the target sequence such as DNA sequence comprising a plurality of nucleic acids of data sequence is generated by recognition means (col. 16, lines 52-67 and col. 17, lines 1-20) nucleotide sequences and subsequences (col. 16, 5-11).

In combination, Young and Rothberg fail to teach scoring the comparison string to determine if the comparison string meets a pre-determined condition or property related to the target string and marking the point in the multi-dimensional map if it is determined that the point should marked, wherein point serves as a model for the target string.

These distinct features, in conjunction with all other limitations of the dependents and independent claims renders claims 31-39, 41-64, 65-74 and 76-104 renders them allowable.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


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**Contact Information**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh Ly whose telephone number is (571) 272-4039 or via E-Mail: ANH.LY@USPTO.GOV or fax to (571) 273-4039. The examiner can normally be reached on TUESDAY – THURSDAY from 8:30 AM – 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene, can be reached on (571) 272-4107 or Primary Examiner Jean Corrielus (571) 272-4032.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Any response to this action should be mailed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, or faxed to: Central Fax Center (703) 872-9306

ANH LY   
MAR. 7<sup>th</sup>, 2005

  
JEAN M. CORRIELUS  
PRIMARY EXAMINER